

The Builder.

No. CLV.

SATURDAY, JANUARY 24, 1846.



THE General Post-office, in St. Martin's-le-Grand, was commenced at the latter end of 1823, and finished in 1824, at the cost of nearly 240,000*l.* including the furniture and fittings. A general invitation to forward designs had been addressed to architects in the first instance, and was accepted by 89 persons, who submitted nearly 100 designs; no one of them, however, was considered practicable, and Mr., now Sir Robert Smirke, being applied to, designed and executed the building as we now see it. The front extends 390 feet; the width of the centre portico is 75 feet, and its projection 25 feet; the columns are 37 feet high, and 4 feet 2 inches in diameter.*

Although accommodation was provided for a larger amount of business than was carried on at the time of its erection, the increase has been so great that, as we mentioned in a previous number, Mr. Sydney Smirke has been called on to construct two large additional rooms, for sorting letters and newspapers.

The new offices are built over the existing offices of the inland department. One of them is 105 feet long by 33 feet; the other is 90 feet long by 50 feet. For executing the former the great peculiarity of construction was required, the new roof being carried by iron-robed trusses, cast in two pieces. In executing the latter, it was necessary, although the span was considerable, to avoid encumbering the lower floor with any pillars or intermediate supports of any kind. The new roof is supported by seven iron arches, each cast in three pieces, and these support also the floor, by means of iron suspension rods, two depending from each iron arch, and dividing the bearing into three equal spaces, as represented by the engravings at p. 42. To these suspension rods are bolted iron bearers, which form the tie, or chord, of the arches, and which are also cast with sockets, to enable them to lay hold of all the timbers of the floor and of the old ceiling of the inland-office beneath.

The chief difficulty in executing this work consisted in the necessity of keeping perfectly undisturbed the old ceiling, with all its heavy cradling, and of avoiding the adoption of any expedient whatever, that could impede for a moment the regular transaction of business below, where a multitude of clerks are constantly engaged.

These ponderous masses of iron were lifted and carried over the ridges of the intervening roofs, and gradually lowered into their places without the slightest injury or accident; a task which would scarcely have been possible but for the facilities afforded by that ingenious modern contrivance, the flying windlass. Each of these enormous frames of iron was put to a severe test, and proved perfectly rigid; shewing a truth of work highly creditable to Messrs. Dewar, the founders, whose steam planing-machine enabled them to give to all the parts bearing on each other, a far more exact and uniform surface than would have been otherwise practicable. The section and part at

large will sufficiently explain the construction. The rooms are lighted by skylights.

An ingenious machine has been contrived to raise and lower the letters and letter-carriers from the bottom to the top of the building, and vice versa. It consists of two endless chains worked by a steam-engine, which carry in rapid succession a series of shelves, each large enough to hold four or five men with their bags. The chief difficulty, of course, was to cause the shelves to pass over and under the pivots on which the chains turn, at top and bottom, in a horizontal position, and this seems to have been perfectly attained. Indeed, the works generally are satisfactorily executed, and reflect credit on all concerned.

Description of the Engravings.

Fig. 1. Section of roof over the sorting-office (with a portion of that over the letter-carriers' office), and the ceiling of the room beneath. The rafter selected is one from the centre of the room, in order to shew the details of the skylight,—the radius of the circle is 25 feet, struck 2 feet 3 inches from the floor. The beds and joints of the rafter are all worked fair and true, and faced throughout their entire length to an even surface; this was done either by the planing or slotting machine, or where that was found impracticable, they were chipped and brought to a fair bed with the file. All the bolt-holes were rymed or drilled through their entire length. The whole of the wrought-iron bolts are of the best faggotted S. C. iron; those which connect the ribs of the rafter, as well as the principal bolts throughout, were heated towards the middle and head, and shrunk after the nuts were tightened. The suspension-rods, 2½ inches in diameter, are of the best Crawbays iron, and were tested to bear 35 tons previously to their being fixed.

Fig. 2. Plan of the back of one of the principal rafters, shewing the sockets to receive the purlins.

Fig. 3. Plan of bearer to floor, shewing its connection to principal rafter, and the sockets to receive binders of floor.

Fig. 4. Plan shewing top of principal and stay-bar to frame of skylight.

Fig. 5 shews the face of centre-joint of principal truss under skylight.

Fig. 6. Plan of the side beds in principal truss.

Fig. 7. Details of wrought-iron suspension bolt.

Figs. 8, 9, and 10. Details of joint and section of bearer.

Fig. 11 shews the mode of supporting the binders of old ceiling from the new binders of floor.

Fig. 12. Section (the reverse way) of temple, and standard of principal truss.

SALE OF THE CHURCH OF ST. BENET FINE.—The internal fittings, &c., of this church were disposed of by auction a few days since. The sale was most numerously attended, and many of the lots realized a price much beyond their actual value, from the circumstance of their connection with Sir Christopher Wren. Lot 13, the carved oak poor-box, with lock, &c. (date on the lock, 1683), fetched four guineas. Lot 17, the carved and panelled oak pulpit, with sounding board, &c., went for fifteen guineas. The paintings of Moses and Aaron, the carved and panelled oak fittings of the altar, the marble floor of the same, and the two tablets with inscriptions in gold, were purchased for 50*l.*

FINE ARTS IN IRELAND.—The fine arts have been pressed into the service of "Repeal" in Ireland. Engravings and books are to be given to persons who collect repeal rent to a certain amount within a given time!

BIOGRAPHY OF ARCHITECTS.

CONTINUATION TOWARDS A LIFE OF THOMAS JONES.

In contemporary literature, a large amount of labour is at present directed towards the biography of eminent men. Any claims to distinction through services in the field, or the senate, how little sooner fitted to rank their authors with the truly great, who have sent their own names down the stream of time, are sure to meet with recognition from some ardent panegyrist or admiring relative. How remarkable then does it appear, that the biography of the great in art has yet to be written. The "Lives of British Artists," by the late Allen Cunningham, are rather pleasant notices of the individuals, and the style of art in which each excelled, than any thing attempting the extended range, which the interesting nature of the subject seems to call for. Designed merely for popular use, they are well adapted to their object, and would supply some valuable suggestions in any future biography. The unpublished documents connected with the history of art, and the lives of architects in England, must be very numerous. Many of the drawings of Sir Christopher Wren, still existing in the libraries at Oxford, are hardly known to professional men. Of Inigo Jones's designs, a very small number have yet been published, and it is even uncertain, what buildings were really his works. Much interesting matter might be obtained from the Harleian MSS., and from other sources, concerning his office of Surveyor of the Works, his designs for the court masques, and the comparative cost of labour and materials at that and the present day. In the accounts of the revels at court in James the First's reign,* Jones's name is frequently mentioned; and here and in the MSS. in the Harleian Collection, allusion is made to his remuneration, his models, and even to the livery, which in accordance with the custom of those days for those attached to the person of the king, he wore as the court architect. Mr. Peter Cunningham has also contributed some particulars to the "Papers of the Shakespeare Society," lately published.† In the Lansdowne MSS. may be seen the "Original plots and profiles of scenes erected at the New Masqueing House, being eight in number, by Inigo Jones." Reference may also be made to Jones's "Stonehenge Restored;" to his son-in-law's defence of the same book; to the "Audit Office Enrolments," quoted and first published by Mr. P. Cunningham, and to the fac-simile sketch-book, executed from the original in the possession of the Duke of Devonshire, at the expense of his grace. From these and other sources we find, that the payments to the then Surveyor of the Works were as follows: "Fee at 20*s.* per diem; one clerk, 6*d.* per diem; expenses when he rideth, at 4*s.* per diem; horse hire, at 4*s.* per diem."—*Harl. MS.*, 1848, fol. 216. In 1610, the salary of Simon Bayly, the surveyor, was as follows (*Harl. MS.*, 1857, fol. 18):

THE WORKS.

Surveyor	Mr. Bayly	For 3 <i>s.</i> a day—20 <i>s.</i> 10 <i>d.</i>	
		One Clerk at 6 <i>d.</i> a day,	
		pl. 1 <i>s.</i> 6 <i>d.</i> Expenses when	11 <i>l.</i> 11 <i>s.</i> 6 <i>d.</i>
		he rideth, at 4 <i>s.</i> a day,	
		estimated at ... 4 <i>s.</i> 10 <i>d.</i>	
		Horse hire ... 1 <i>l.</i> 11 <i>s.</i> 6 <i>d.</i>	

Inigo Jones's first office under the crown, which was that of Surveyor of the Works to Henry, Prince of Wales, ceased in 1613, after the death of that prince. Jones was at Vienna, on his second visit to Italy, in Sept. 23rd, 1613, and at Rome in the following year. Simon Bayly was still the surveyor to the crown, but at the end of the year 1615, his salary was discontinued, and Inigo Jones appointed surveyor, with pay, commencing from the 1st of October, previous, at the rate of 8*s.* per diem for his entertainment, 20*l.* per annum for his recompence of travels, and 2*s.* 8*d.* per diem for riding and travelling charges "to sundry of His Majesty's Houses." This is given by Mr. Cunningham from the accounts of the paymaster of the works, preserved in the Audit Office. The king's warrant to Lord Hay for the issue of livery from the royal wardrobe, for Jones is dated 16th March, 1616. According to a MS. in the British Museum this livery

* Extracts from the "Accounts of the Revels at Court in Elizabeth and James's reigns; with learned notes and shewes." By P. Cunningham. Esq. Printed for the Shakespeare Society: London, 1841.

† "Inigo Jones and his office under the Crown," in the Shakespeare Society's Papers. 3 vols. 1844-5.

‡ Also quoted by Mr. Cunningham.

* An account of the building, with plan and elevation, will be found in Leach's edition of "The Public Buildings of London."